

Question

1. Variable length subnet Masking
2. 20.128.16.0/25
3. 1st – 50 host
4. 2nd – 30 host
1. 4th & 5th - 12 host

Calculate 1st and last host address for the above networks?

1. Hint- 7 bit – 1-network, 6 host
2. 0 – 50 host
3. 1 – split – 1-network, 5-host
4. 0 – 30 host
5. 1-split -1(2) – network, 4-host (14)

Answer:

20.128.16.0/25

20.128.16.00000000 → Network Address

Network Address
Host Address
Subnet Address

1st – 50 host for 0 Bit

26 → 64 - 2 = 62

20.128.16.00000000 → Host Address

20.128.16.00000000 → Subnet Bit = 0

First Address → 20.128.16.00000001 → 20.128.16.1

Last Address → 20.128.16.00111110 → 20.128.16.62

20.128.16.00000000 → Host Address

20.128.16.01000000 → Subnet Bit = 1

First Address → 20.128.16.01000001 → 20.128.16.65

Last Address → 20.128.16.01111110 → 20.128.16.126

2nd – 30 host for 1 Bit

25 → 32 - 2 = 30

20.128.16.00000000 → Host Address

20.128.16.01000000 → Subnet Bit = 0

First Address → 20.128.16.01000001 → 20.128.16.65

Last Address → 20.128.16.01011110 → 20.128.16.94

2nd – 30 host for 1 Bit

$25 \rightarrow 32 - 2 = 30$

20.128.16.00000000 → Host Address

20.128.16.01100000 → Subnet Bit = 1

First Address → 20.128.16.01100001 → 20.128.16.97

Last Address → 20.128.16.01111110 → 20.128.16.126

4th & 5th – 12 host for 0 Bit

$24 \rightarrow 16 - 2 = 14$

20.128.16.00000000 → Host Address

20.128.16.01100000 → Subnet Bit = 0

First Address → 20.128.16.01100001 → 20.128.16.97

Last Address → 20.128.16.01101110 → 20.128.16.110

4th & 5th – 12 host for 1 Bit

$24 \rightarrow 16 - 2 = 14$

20.128.16.00000000 → Host Address

20.128.16.01110000 → Subnet Bit = 1

First Address → 20.128.16.01110001 → 20.128.16.113

Last Address → 20.128.16.01111110 → 20.128.16.126

উদাহরণঃ

সাবনেট ৩ বিট আসলে আমাকে প্রথম ২ বিট ১ ধরে এবং লাস্ট বিট ০ ধরে করতে হবে সেটা সাবনেট ০ এর জন্য।

এবং

সাবনেট ১ এর জন্য আমাকে সাবনেট এর ৩ বিটকেই ১ ধরে আমাকে হিসাব করতে হবে।